The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

- 1-4. (Cancelled)
- 5. (Currently Amended) [[The]] <u>A</u> temperature control device according to elaim 1, further comprising:
 - a plurality of compartments holding microorganisms or cells;
 - a heater and a cooling unit making control of temperatures inside said compartments;
- a thermometer measuring <u>an</u> [[said]] ambient temperature <u>of an environment in which</u> the device is installed;
 - a storage unit storing calibration data; and
- a control unit setting a target value for said temperatures inside said eassettes compartments, and controlling said heater and said cooling unit with a second target value that is obtained based on said target value and said calibration data in accordance with said ambient temperature such that control of temperatures inside said compartments is corrected by using said ambient temperature measured by said thermometer.
- 6. (Previously Presented) The temperature control device according to claim 5, wherein said heater comprises:
 - a first heater line and a second heater line;
 - a plurality of first thermal conductors provided for said first heater line; and
 - a plurality of second thermal conductors provided for said second heater line.
- 7. (Previously Presented) The temperature control device according to claim 5, wherein said heater comprises:
 - a first heater line and a second heater line;
 - a plurality of first thermal conductors provided for said first heater line; and
 - a plurality of second thermal conductors provided for said second heater line,

wherein said first thermal conductor and said second thermal conductor are controlled to different temperatures from each other.

- 8. (Previously Presented) The temperature control device according to claim 5, wherein said heater comprises:
 - a first heater line and a second heater line;
 - a plurality of first thermal conductors provided for said first heater line;
 - a plurality of second thermal conductors provided for said second heater line;
 - a first thermometer provided for one of said first thermal conductors; and
 - a second thermometer provided for one of said second thermal conductors,
 - said first thermal conductors being equal in thermal capacity,
 - said second thermal conductors being equal in thermal capacity, and
- said first thermal conductors and said second thermal conductors being different from each other in thermal capacity.
- 9. (Currently Amended) [[The]] <u>A</u> temperature control device according to claim 1, further comprising:
 - a plurality of compartments holding microorganisms or cells;
 - a heater and a cooling unit making control of temperatures inside said compartments;
- a thermometer measuring <u>an</u> [[said]] ambient temperature <u>of an environment in which</u> the device is installed;
- a control unit setting a target value for said temperatures inside said eassettes compartments; and
 - a calculation unit, wherein
- said calculation unit calculates a second target value <u>based on said target value and</u> <u>calibration data in accordance with from said ambient temperature and said target value</u>, and
- said control unit controls said heater and said cooling unit with said second target value such that control of temperatures inside said compartments is corrected by using said ambient temperature measured by said thermometer.

Appl. No. 10/585,612 Amendment dated April 30, 2010 Reply to Office Action of January 19, 2010

- 10. (Previously Presented) The temperature control device according to claim 9, wherein said heater comprises:
 - a first heater line and a second heater line;
 - a plurality of first thermal conductors provided for said first heater line; and
 - a plurality of second thermal conductors provided for said second heater line.
- 11. (Previously Presented) The temperature control device according to claim 9, wherein said heater comprises:
 - a first heater line and a second heater line;
 - a plurality of first thermal conductors provided for said first heater line; and
 - a plurality of second thermal conductors provided for said second heater line,
- wherein said first thermal conductor and said second thermal conductor are controlled to different temperatures from each other.
- 12. (Previously Presented) The temperature control device according to claim 9, wherein said heater comprises:
 - a first heater line and a second heater line
 - a plurality of first thermal conductors provided for said first heater line;
 - a plurality of second thermal conductors provided for said second heater line;
 - a first thermometer provided for one of said first thermal conductors; and
 - a second thermometer provided for one of said second thermal conductors,
 - said first thermal conductors being equal in thermal capacity,
 - said second thermal conductors being equal in thermal capacity, and
- said first thermal conductors and said second thermal conductors being different from each other in thermal capacity.
- 13. (Previously Presented) The temperature control device according to claim 12, wherein

said second heater line is provided on an outer edge side of said heater than said first heater line is, Appl. No. 10/585,612 Amendment dated April 30, 2010 Reply to Office Action of January 19, 2010

each of said first thermal conductors includes a pair of heat blocks provided on both sides of said first heater line, and

each of said second thermal conductors includes one heat block provided for said second heater line on the side of said first heater line.

14. (Currently Amended) The temperature control device according to any one of claims [[1]] 5 to 13, further comprising:

a sensor for each of said eassettes compartments, said sensor measuring a measurement value that varies depending on metabolism of said microorganisms or cells.